

PRODUCT DATA SHEET

Sikafloor®-169

Low VOC epoxy resin binder for decorative mortar screeds, terrazzo floorsystems and seal coats

PRODUCT DESCRIPTION

Sikafloor®-169 is a 2-part epoxy resin binder for mortars, screeds, terrazzo floor systems and seal coats. It is used in the aesthetic Sikafloor® Terrazzo and DecoDur range in areas where normal to high mechanical loading and wear is expected.

USES

Sikafloor®-169 may only be used by experienced professionals.

The Product can be used as a:

- Binder for coloured quartz mortars and screeds
- Coloured binder for Terrazzo floor systems
- Transparent sealer coat for broadcast coloured quartz mortar screeds and Sikafloor® DecoDur systems

CHARACTERISTICS / ADVANTAGES

- Very versatile - can be used as coloured or transparent binder or sealer
- Helps to achieve good indoor air quality due to low VOC emissions
- Good aesthetics over the product's lifetime due to good yellowing resistance
- Low VOC content
- Good mechanical resistance
- Good chemical resistance
- Resistant to staining
- Low viscosity

ENVIRONMENTAL INFORMATION

- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization — Environmental Product Declarations
- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization — Material Ingredients
- Conformity with LEED v4 EQc 2: Low-Emitting Materials
- IBU Environmental Product Declaration (EPD) available
- VOC emission certificate according to AgBB und DIBT approval requirements
- Class A+ according to French Regulation on VOC emissions

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 13813:2002 — Screed material and floor screeds — Screed material
- CE Marking and Declaration of Performance to EN 1504-2:2004 — Products and systems for the repair and protection of concrete structures — Part 2: Surface protection systems for concrete — Coating
- Sliding test DIN 51130, Sikafloor®-169, Certificate No. 020109-15-11
- Sliding test DIN 51131, Sikafloor®-169, Roxeler, Certificates No. 020108-13-30a, 020108-13-31a, 020109-15-10a, 020109-15-13a, 020109-15-4a, 020171-14-1a, 020197-15-1a, 020197-15-5a
- Coating compatibility test PV 3.10.7, Sikafloor®-169, HQM, Report No. 14-04-14201871-7
- Biological Stress ISO 846, Sikafloor®-169, CSM Fraunhofer, Certificate No. SI/1008-533



PRODUCT INFORMATION

Chemical Base	Solvent free epoxy		
Packaging	Transparent version		
	Part A container	7.50 kg containers	
	Part B container	2.50 kg containers	
	Part A + Part B	10 kg unipacks	
	Pigmented version		
	Part A container	15 kg containers	
	Part B container	5 kg containers	
	Part A + Part B	20 kg unipacks	
Appearance / Colour	Part A, transparent	cloudy liquid	
	Part A, coloured	coloured liquid	
	Part B	yellowish, liquid	
	Final floor appearance	Gloss finish	
	Note: When the product is exposed to direct sunlight, there may be some discolouration and colour variation. This has no influence on the function and performance of the coating.		
Shelf Life	24 months from date of production		
Storage Conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.		
Density	Part A	~1.2 kg/l	(EN ISO 2811-1)
	Part B	~1.0 kg/l	
	Mixed product	~1.1 kg/l	

TECHNICAL INFORMATION

Shore D Hardness	~80 (7 days / +23 °C)	(DIN 53 505)
Abrasion Resistance	47 mg	(EN ISO 5470-1)
Chemical Resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information.	
Thermal Resistance	Short-term, maximum 7 days	+60 °C
	IMPORTANT	
	No simultaneous mechanical and chemical strain	
	While the product is exposed to temperatures up to +60 °C, do not also subject it to chemical and/or mechanical strain, as it may cause damage to the product.	

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B	75 : 25 (by weight)
Consumption	Applied as a seal coat on Sikafloor® smooth substrates	~0.15 kg/m²
	Applied as a seal coat on Sikafloor® broadcast substrates	~0.6–0.9 kg/m²
	Note: These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.	

Product Temperature	Minimum	+10 °C		
	Maximum	+30 °C		
Ambient Air Temperature	Minimum	+10 °C		
	Maximum	+30 °C		
Relative Air Humidity	80 % r.h. max			
Dew Point	Beware of condensation. The substrate and uncured applied floor material must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and high humidity conditions increase the probability of blooming.			
Substrate Temperature	Minimum	+10 °C		
	Maximum	+30 °C		
Substrate Moisture Content	< 4 % part by weight			
Pot Life	+10 °C	~60 minutes		
	+20 °C	~30 minutes		
	+30 °C	~20 minutes		
Waiting Time / Overcoating	Before overcoating the product, allow:			
	Substrate temperature	Minimum	Maximum	
	+10 °C	~45 hours	~4 days	
	+20 °C	~36 hours	~3 days	
	+30 °C	~24 hours	~18 hours	
	Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.			
Applied Product Ready for Use	Temperature	Foot traffic	Light traffic	Full cure
	+10 °C	~3 days	~5 days	~10 days
	+20 °C	~48 hours	~3 days	~7 days
	+30 °C	~24 hours	~48 hours	~5 days
Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.				

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

According to the EU Directive 2004/42/CE, the maximum allowed content of VOC (product category IIA / x type xx) is 500 g/l (Limits 2010) for the ready to use product.

The maximum content of Sikafloor®-169 is ≤ 500 g/l VOC for the ready to use product.

FURTHER DOCUMENTS

- Sika® Information Manual: Evaluation and preparation of surfaces for flooring systems
- Sika® Information Manual: Mixing and application of flooring systems
- Sikafloor® cleaning concept

LIMITATIONS

Indentations

Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading may lead to indentations in the resin.

APPLICATION INSTRUCTIONS

EQUIPMENT

MIXING EQUIPMENT

- Electric single paddle mixer (300 to 400 rpm)
- Electric double paddle mixer (> 700 W, 300 to 400 rpm)
- Forced action mixer

SUBSTRATE QUALITY / PRE-TREATMENT

SUBSTRATE CONDITION

Cementitious substrates (concrete / screed) must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm². Substrates must be free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

SUBSTRATE MOISTURE CONTENT

The Product can be applied on substrates with a moisture content of < 4%. The substrate must be visibly dry with no standing water.

TREATMENT OF JOINTS AND CRACKS

Construction joints and existing static surface cracks in substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.

MIXING

MIXING PROCEDURE

1. Mix Part A (resin) for ~10 seconds with a single paddle mixer (300–400 rpm).
2. Add Part B (hardener) to Part A.
3. Switch to an electric double paddle mixer (300–400rpm, > 700 W).
4. While mixing Parts A + B, gradually add the required filler or aggregates.
5. Mix for a further 2 minutes until a uniform mix is achieved.
6. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
7. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

IMPORTANT

Protect from moisture

After application, protect the Product from damp, condensation and direct water contact for at least 24 hours.

IMPORTANT

Temporary heating

If temporary heating is required, do not use gas, oil, paraffin or other fossil fuel heaters. These produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish. For heating, use only electric powered warm air blower systems.

BINDER

1. Pour the Product onto the surface.
2. Apply the Product evenly over the surface with a trowel.

SEAL COAT

1. Pour the mixed Product onto the surface. Note: The consumption is specified in Application Information.
2. Apply the Product evenly over the surface with a squeegee.
3. Back roll the surface in two directions at right angles with a short pile roller. Note: A seamless finish can be achieved if a "wet" edge is maintained during application.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Thinner C immediately after use. Hardened material can only be removed mechanically

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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